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Green skills and environmental innovations in the Nordic countries

Abstract for submission to the 2018 RIP conference

Track B: "Green" regional development, environmental sustainability and policy

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Abstract

Supporting green transition and creating green growth pose challenges for regional innovation policy. Traditional accounts of green growth have relied on sectoral classifications. However, the empirical evidence indicates that the underlying assumption that all firms within a predefined sector contribute to green growth and that all firms outside such sectors do not is often wrong. This approach ignores that green growth and sustainability transitions may occur in sectors, which are not usually associated with eco-technologies (Shapira et al., 2014). Therefore, a particular challenge for regional economies is promoting conditions for firms introducing innovation that have environmental benefits for themselves, the users or both - regardless of the sector.

Recent research has shown that the skills and human capital needed in green jobs are different from that of non-green jobs (Consoli et al. 2016). Based on detailed occupational data from the US, Consoli et al. (2016) find that green jobs often require a higher level of human capital and specific cognitive and interpersonal

skills. However, these green jobs are not directly translatable to a Nordic context. In addition, little is known on whether these green skills actually are important for firms that aims at developing eco-innovations.

The purpose of this paper is to identify the regional distribution of green skills in the Nordic countries and analyse whether these are important for firms' introducing eco-innovations. The paper draws on a combination of firm level survey data on eco-innovations linked with employer-employee census data from Denmark, Sweden, Finland and Norway. The paper develops an education-based and an occupation-based indicator for green skills. Results show that, both indicators are positively related to firms' likelihood of introducing eco-innovations. The different Nordic countries show rather distinct patterns of the geographical distribution of these green skills, which have implications for firms' possibilities for introducing eco-innovations.